

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: Unknown )  
Filing Date: Unknown )  
Priority Date: 3 January 2001 )  
Applicants: MATEY, Jesus )  
For: INFORMATION ON DEMAND )

**PRELIMINARY AMENDMENT**

Director For Patents  
Box: New Application  
Washington, D.C. 20231

Dear Sir:

This is a preliminary amendment to the enclosed application entitled "Information on Demand" claiming priority to British Patent Application No. 0100076.9 filed 3 January 2001.

**In the Specification:**

Please amend the specification as follows:

Page 1, after the title, insert the following headers and paragraph:

**--CROSS-REFERENCE TO RELATED APPLICATION**

This application claims priority to British Patent Application No. No. 0100076.9 filed 3 January 2001.

**BACKGROUND OF THE INVENTION-**

Page 1, lines 7, 8, 14, and 21 change "programme" to --program--; line 15, change "programmes" to --programs--.

Page 2, lines 2, 5, 14, 19 and 21 change "programme" to --program--; lines 13, 16 and 19

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, change "programmes" to --programs--.

Page 3, before line 5, insert the Header:

**--SUMMARY OF THE INVENTION--**

Page 3, lines 8, 12, 16, 17, 22, 23, 25, 26, and 29 change "programme" to --program--;  
line 12, change "characterised" to --characterized--.

Page 4, lines 10, 11, and 17 change "programme" to --program--; line 26, change  
"programmes" to --programs--; line 27, change "Programme" to --Program--.

Page 5, lines 5, 9, 12, 14, 19, 20 and 27 two occurrences, change "programme" to --  
program--; line 7, change "characterised" to --characterized--; before line 25, insert the following  
header:

**--DESCRIPTION OF THE PREFERRED EMBODIMENTS--**

Page 6, line 27, change "programme" to --program--.

Page 9, after the last line, insert the following paragraph:

--While the invention has been described with a certain degree of particularity, it is  
manifest that many changes may be made in the details of construction and the arrangement of  
components without departing from the spirit and scope of this disclosure. It is understood that  
the invention is not limited to the embodiments set forth herein for purposes of exemplification,  
but is to be limited only by the scope of the attached claim or claims, including the full range of  
equivalency to which each element thereof is entitled.--

**IN THE CLAIMS:**

1. (Amended) A broadcast data receiver for the reception of data broadcast from a remote  
location, said receiver comprising:

means for processing of the data and for generation of video of a current display and/or audio therefrom in the form of a television [programme] program for viewing on a display screen; [, said receiver including]

one or more information tables which include strings of the data; [and said receiver having]

means by which a user can request to be informed of one or more items of data from the string(s) being identified in a user-selected [programme] program; and [characterised in that]

on user-selection of a pre-designated button of a control unit of the receiver, said receiver provides a display over the current video display on the display screen informing the user of whether said user requested item or items of data have been identified in said user-selected [programme] program, irrespective of whether the receiver is currently tuned into said user-selected [programme] program at that time.

2. (Amended) A broadcast data receiver according to claim 1 [characterised in that the] wherein said string of data is identified in respect of a live "sport" event.

3. (Amended) A broadcast data receiver according to claim 1 [characterised in that the] wherein said receiver informs the user of least one from the group consisting of [any or any combination of] whether or not the item or items of data have been identified in the selected [programme] program, the frequency at which the items of data were identified in [said [programme] the program, details relating to the occurrence of the data items or an update of the occurrence of said data items since the last user-request for information and/or since the user-selected [programme] program started.

4. (Amended) A broadcast data receiver according to claim 1 [characterised in that the] wherein said string of data includes at least one selected from the group consisting of [any or any combination of] the score of [the] a sport event, participants in the event, location of the event and[or] scorers in the event.
5. (Amended) A broadcast data receiver according to claim 1 [characterised in that the] wherein said string of data is updated in real time at [the] a broadcaster location and transmitted to [the] said receiver.
6. (Amended) A broadcast data receiver according to claim 1 [characterised in that] wherein the user [can] may select one or more data strings from the information tables in relation to a user-selected [programme] program.
7. (Amended) A broadcast data receiver according to claim 1 [characterised in that] wherein the user [can] may input data strings into the one or more information tables for subsequent selection in relation to the user selected [programme] program.
8. (Amended) A broadcast data receiver according to claim 1 [characterised in that the] wherein said control unit is a remote control handset.
9. (Amended) A method of using a broadcast data receiver having one or more information tables which include strings of data [, said broadcast data receiver] for the reception of data broadcast from a remote location, said method comprising the following steps:

processing of the data and generation of video and/or audio therefrom in the form of a television [programme] program for viewing on a display screen[, said receiver including one or more information tables which include strings of data and characterised in that said method includes the steps of];

a user selecting to be informed of one or more items of data from the string(s) being identified in a user-selected [programme] program; and[.]

on user-selection of a pre-designated button of a control unit of said receiver, said receiver searching the Event Information Tables(s) [(EIT)] for said one or more items of data relating to the user-selected [programme] program; and

following said search informing said user of whether said item or items were identified in said user-selected [programme] program.

#### REMARKS

Attached is the clean version of the claims and new paragraphs as required in Section 1.121(4) (ii).

The application should now be in condition for examination, which is respectfully requested.

Respectfully Submitted

HEAD, JOHNSON & KACHIGIAN

Dated: 2 January 2002

BY: 

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New Header to be Inserted on Page 1, before line 1:

**--CROSS-REFERENCE TO RELATED APPLICATION**

This application claims priority to British Patent Application No. 0100076.9 filed 3 January 2001.

**BACKGROUND OF THE INVENTION**

**Replacement Paragraph to be Inserted into Page 1**

Typically, when a viewer is watching a television program, the data for the generation of the program is broadcast from a remote location and what the viewer sees and how often they see it is determined by the broadcaster providing the data. The fact that the viewer may not be able to see certain data, which is displayed sporadically, when the viewer wishes to see it, can cause frustration to the viewer and, in some instances, can prevent the viewer from continuing to watch the program. This can be particularly frustrating during the transmission of programs which are live, which tend to be, although not exclusively, sporting events. In this type of event, as the action is happening at the same time as the viewer is watching, the viewer is obviously not aware of the final outcome and is therefore entirely reliant upon the information provided by the broadcaster. However, if the viewer misses part of the transmission or the broadcaster omits to provide information, the viewer may have to watch the program for a significant period of time before they can ascertain exactly what is being shown and/or what other events are happening at the same time.

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Replacement Paragraphs to be Inserted in Page 2:

when there is a specified event such as a goal in a football match, while watching another program, the viewer at present cannot be informed of the event.

United States Patent US5589892 discloses the provision of an electronic program schedule system which allows a user to select a category of interest for storing in a user preference list, such as sport, movies and/or similar. When a user is tuned to a particular channel, the user can select a browse button on the remote control handset and a graphic overlay is displayed over the currently viewed display. The graphic overlay contains information relating to channels identified by the category of interest in the user preference list. Thus for example, if a sporting category is selected in the user preference list, all the channels with sports programs shown thereon will in turn be displayed in the graphic overlay with information relating to each program. The user is required to use the arrow keys on the remote control to move through the programs until they arrive at the program of interest to them. Thus although US5589892 provide a means of accessing information on demand, it is time consuming for the user to pass through a number of programs before arriving at a program of interest and it is likely to be quicker for the user to tune directly into the channel showing the program of interest to them to obtain information relating thereto.

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SUMMARY OF THE INVENTION

Replacement Paragraphs to be Inserted into Page 3

In a first aspect of the invention there is provided a broadcast data receiver for the reception of data broadcast from a remote location, processing of the data and generation of video and/or audio therefrom in the form of a television program for viewing on a display screen, said receiver including one or more information tables which include strings of data and said receiver having means by which a user can request to be informed of one or more items of data from the string(s) being identified in a user-selected program and characterized in that on user-selection of a pre-designated button of a control unit of the receiver, said receiver provides a display over the current video display on the display screen informing the user of whether said user requested item or items of data have been identified in said user-selected program, irrespective of whether the receiver is currently tuned into said user-selected program at that time.

The user is therefore informed of any or any combination of the occurrence of their requested data item or items, the frequency of occurrence of the requested data item or items, irrespective of whether they are watching the selected program or whether they are tuned to a different program on another channel, video and/or the like. For example, the user can request to be updated on the occurrence of data items identified in the selected program since the last user request for information or since the selected program began and/or the like.

Preferably the control unit is a remote control handset. The user depresses an appropriate button on the handset when they require information relating to their pre-selected program.

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#### Replacement Paragraphs to be Inserted into Page 4

Preferably an event information table (EIT) contains the strings of data. The EIT is typically a table of user and/or pre-defined requests that are stored in the memory of the receiver. The string of data relates to the request and can include the channel on which a particular television program is being shown, the start and/or finish times of a particular program, one or more titles of programs, details as to the type of information the user wishes to be updated on and/or the like.

In one embodiment, in addition to or alternatively, the viewer is warned when a specific event has occurred even if they are not watching the particular television program or listening to an audio channel or have not specifically requested the information at that moment. An example of this is that if there is a change in the score of a game of football being shown on a particular channel, and the viewer is watching another channel, the viewer can request that they are informed when the change in score occurs.

The introduction of this invention in the current Digital TV systems requires a change in the System Information (SI) tables (tables carrying information about the network and transport streams carrying services, such as channels and programs), and/or in the way the EEPG (Electronic Program Guide) handles the SI information and/or in the way the SI is generated.

## Header to be Inserted into Page 5

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

#### Replacement Paragraphs for Page 5

According to a second aspect of the present invention there is provided a method of using a broadcast data receiver, said broadcast data receiver for the reception of data broadcast from a remote location, processing of the data and generation of video and/or audio therefrom in the form of a television program for viewing on a display screen, said receiver including one or more information tables which include strings of data and characterized in that said method includes the steps of a user selecting to be informed of one or more items of data from the string(s) being identified in a user-selected program and, on user-selection of a pre-designated button of a control unit of said receiver, said receiver searching the Event Information Tables(s) (EIT) for said one or more items of data relating to the user-selected program, and following said search informing said user of whether said item or items were identified in said user-selected program.

The present invention allows a user to quickly and easily gain access to information relating to a pre-selected program of the user's choice at the user's convenience and whilst watching a program on a different channel. The user can therefore be continually updated with, for example, the latest score of a football match or the like, when they depress a button on the remote control handset of the television system without having to leave the channel the user is currently tuned to.

In a preferred embodiment the invention requires the use of two descriptors in the EIT p/f (present program, following program for a particular channel) "actual" and "other" tables (for the actual Transport Stream and for other Transport Streams). These EIT tables are sent to the Broadcast Data Receiver (BDR) at whichever frequency the BDR is

Replacement Paragraph to be Inserted into Page 6

The broadcaster supplies the text in the desired format. If the event is a football game the text could be something like "Manchester City = 1\n Manchester United - 1" where \n stands for the character End Of Line. In one format the electronic program guide facility (EEPG) can be used to display this information as

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New Paragraph for Page 9 to be Inserted After the Last Line:

While the invention has been described with a certain degree of particularity, it is manifest that many changes may be made in the details of construction and the arrangement of components without departing from the spirit and scope of this disclosure. It is understood that the invention is not limited to the embodiments set forth herein for purposes of exemplification, but is to be limited only by the scope of the attached claim or claims, including the full range of equivalency to which each element thereof is entitled.

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### Clean Version of the Claims

1. (Amended) A broadcast data receiver for the reception of data broadcast from a remote location, said receiver comprising:

means for processing of the data and for generation of video of a current display and/or audio therefrom in the form of a television program for viewing on a display screen;

one or more information tables which include strings of the data;

means by which a user can request to be informed of one or more items of data from the string(s) being identified in a user-selected program; and

on user-selection of a pre-designated button of a control unit of the receiver, said receiver provides a display over the current video display on the display screen informing the user of whether said user requested item or items of data have been identified in said user-selected program, irrespective of whether the receiver is currently tuned into said user-selected program at that time.

2. (Amended) A broadcast data receiver according to claim 1 wherein said string of data is identified in respect of a live "sport" event.

3. (Amended) A broadcast data receiver according to claim 1 wherein said receiver informs the user of least one from the group consisting of whether not the item or items of data have been identified in the selected program, the frequency at which the items of data were identified in the program, details relating to the occurrence of the data items or an update of the occurrence of said data items since the last user-request for information and/or since the user-selected program started.

4. (Amended) A broadcast data receiver according to claim 1 wherein said string of data includes at least one selected from the group consisting of the score of a sport event, participants in the event, location of the event and scorers in the event.

5. (Amended) A broadcast data receiver according to claim 1 wherein said string of data is updated in real time at a broadcaster location and transmitted to said receiver.

one or more data string from the information tables in relation to a user-selected program.

7. (Amended) A broadcast data receiver according to claim 1 wherein the user may input data strings into one or more information table for subsequent selection in relation to the user selected program.

8. (Amended) A broadcast data receiver according to claim 1 wherein said control unit is a remote control handset.

9. (Amended) A method of using a broadcast data receiver having one or more information tables which include strings of data for the reception of data broadcast from a remote location, said method comprising the following steps:

processing of the data and generation of video and/or audio therefrom in the form of a television program for viewing on a display screen;

a user selecting to be informed of one or more items of data from the string(s) being identified in a user-selected program; and

on user-selection of a pre-designated button of a control unit of said receiver, said receiver searching the Event Information Tables(s) for said one or more items of data relating to the user-selected program; and

following said search informing said user of whether said item or items were identified in said user-selected program.